

CLAIMS

What is claimed is:

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6 *ai* Claim 1. A process for determining a proteomic
7 basis for development and progression of abnormal
8 physiological conditions comprising:
9 obtaining a patient sample containing proteomic
10 material;
11 preparing said patient sample to facilitate proteomic
12 investigation thereof;
13 isolating one or more patient specific proteomic
14 materials from said patient sample; and
15 comparing said one or more isolated patient specific
16 proteomic materials against a library of proteomic materials
17 having characteristics identifiable with both normal and
18 abnormal physiological conditions or predictive hallmarks
19 thereof;
20 wherein said one or more isolated patient specific
21 proteomic materials are characterized as being positively or
22 negatively indicative of one or more abnormal physiological
23 conditions or predictive hallmarks thereof.

24 Claim 2. A process in accordance with claim 1, further
25 including the step of:

1 sequencing said one or more isolated patient specific
2 proteomic materials.

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4 Claim 3. A process in accordance with claim 1, further
5 including the step of:

6 developing at least one antibody to said isolated
7 patient specific proteomic material.

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9 Claim 4. A process in accordance with claim 3, further
10 including the step of:

11 expressing at least one protein marker specific to said
12 at least one antibody to said isolated patient specific
13 proteomic material.

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15 Claim 5. A process in accordance with claim 3, further
16 including the step of:

17 performing at least one interactive mapping step to
18 characterize said at least one antibody.

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20 Claim 6. A process in accordance with claim 5 wherein
21 said interactive mapping step includes one or more steps
22 selected from the group consisting of creation of engineered
23 antibodies, directly determining the three-dimensional
24 structure of said antibody directly from an amino acid
25 sequence thereof; cellular localization, sub-cellular

1 localization, protein-protein interaction, receptor-ligand
2 interaction, and pathway delineation.

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4 Claim 7. A process in accordance with claim 6 wherein
5 said engineered antibodies are antibodies tagged with a
6 material selected from the group consisting of GFP, colloidal
7 gold, streptavidin, avidin and biotin.

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9 Claim 8. A process in accordance with claim 4, further
10 including the step of:

11 performing at least one interactive mapping step to
12 characterize said at least one protein marker.

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14 Claim 9. A process in accordance with claim 8 wherein
15 said interactive mapping step includes one or more steps
16 selected from the group consisting of creation of engineered
17 proteins, directly determining the three-dimensional
18 structure of said protein directly from an amino acid
19 sequence thereof; cellular localization, sub-cellular
20 localization, protein-protein interaction, receptor-ligand
21 interaction, and pathway delineation.

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1 Claim 10. A process in accordance with claim 9 wherein
2 said engineered proteins are proteins tagged with a material
3 selected from the group consisting of GFP, colloidal gold,
4 streptavidin, avidin and biotin.

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